

CLAIMS

1. A wind generator arrangement for use in generating electrical power, the arrangement comprising a plurality of wind generators in at least two rows, wherein generators of any one row are at a different height to those of adjacent rows and/or a wind generator of one row is offset relative to any wind generators of an adjacent row.
2. An arrangement as claimed in claim 1, wherein each wind generator is mounted on a height adjustable pole.
3. An arrangement as claimed in claim 2, wherein the height of the pole is telescopically adjustable.
4. An arrangement as claimed in claim 1, 2 or 3, wherein the wind generators are mounted on a platform that is itself mounted on a roof or other suitable structure.
5. An arrangement as claimed in any one of claims 1 to 4, wherein the wind generators initially produce A.C. electrical power.
6. An arrangement as claimed in claim 5, wherein the wind generators are linked to means for converting the A.C. into A.C. compatible with the A.C. provided to the building.
7. An arrangement as claimed in any one of claims 1 to 6, wherein the wind generators are rotatably mounted.
8. An arrangement as claimed in any one of claims 1 to 6, wherein a wind generator is rotatably mounted on a support pole off centre thereof.

9. An arrangement as claimed in claim 8, wherein the wind generator has a tail fin offset towards the opposite side of the support pole.
10. An arrangement as claimed in claim 9, wherein the tail fin is spring-loaded.
11. An arrangement as claimed in claim 9 or 10, wherein the tail fin has a damper for controlling rate of reaction.
12. An arrangement as claimed in any one of claims 1 to 11, wherein the wind generator has a three-bladed rotor.
13. A wind generator for producing electrical power in response to wind power acting on a rotor, wherein the generator is rotatably mounted on a support post off centre thereof.
14. A wind generator as claimed in claim 13 having a tail fin that is offset towards the opposite side of the support post.
15. A wind generator as claimed in claim 14, wherein the tail fin is spring loaded.
16. A wind generator as claimed in claim 14 or 15, wherein the tail fin has a damper for controlling rate of reaction.
17. A wind generator as claimed in any one of claims 13 to 16, wherein the rotor has three blades.
18. Means for converting electrical power generated by one or more wind generators into A.C. suitable for use in providing electrical power for a building to supplement or replace electrical power supply from the national grid.

19. Means according to claim 18, wherein the wind generator is as claimed in any one of claims 1 to 17.
20. Means as claimed in claim 18 or 19, wherein A.C. current produced by the wind generators is taken through a full wave internally or externally mounted rectifier to convert it to D.C.
21. Means as claimed in claim 20, wherein from the rectifier, the D.C. is converted to square wave A.C.
22. Means as claimed in claim 21, wherein the D.C. is converted to A.C. by means of a chopper circuit.
23. Means as claimed in claim 22 having means for converting the converted A.C. to sine wave A.C.
24. Means as claimed in claim 23, wherein the means for converting the A.C. to sine wave A.C. is a constant voltage transformer.
25. Means as claimed in any one of claims 18 to 24 including means for producing the sine wave A.C., so as to be in phase with and at the same voltage as the A.C. supply from the normal utility supplier to the building.
26. Means as claimed in any one of claims 18 to 25, provided in a box or case to which the wind generators can be connected and which itself can be connected into the electrical circuitry of the building to feed the load thereon.
27. A system for converting electrical power produced by wind generators into A.C. power for use in providing electrical power for a building to supplement or replace electrical power supply from the national grid, the system comprising one or more wind generators for producing A.C. from wind power and a control

unit for converting the generated A.C. into A.C. in the same phase and at the same voltage as the A.C. supply from the national grid.

28. A system as claimed in claim 27, wherein the wind generator is as claimed in any one of claims 1 to 17.

29. A system as claimed in claim 27 or 28, wherein A.C. current produced by the wind generators is taken through a full wave internally or externally mounted rectifier to convert it to D.C.

30. A system as claimed in claim 29, wherein from the rectifier, the D.C. is converted to square wave A.C.

31. A system as claimed in claim 30, wherein the D.C. is converted to A.C. by means of a chopper circuit.

32. A system as claimed in claim 31 having means for converting the converted A.C. to sine wave A.C.

33. A system as claimed in claim 32, wherein the means for converting the A.C. to sine wave A.C. is a constant voltage transformer.

34. A system as claimed in any one of claims 27 to 33 including means for producing the sine wave A.C., so as to be in phase with and at the same voltage as the A.C. supply from the normal utility supplier to the building.

35. A system as claimed in any one of claims 27 to 34, provided in a box or case to which the wind generators can be connected and which itself can be connected into the electrical circuitry of the building to feed the load thereon.

36. A wind generator for producing electrical power substantially as hereinbefore described with reference to and as illustrated in any one of the accompanying drawings.

37. Means for generating electrical power from wind power substantially as hereinbefore described with reference to and as illustrated in any of the accompanying drawings.